

# Role of Media in Disaster Reduction

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**National Meteorological and Hydrological Services (NMHSs)** have a unique responsibility in Early Warning System (EWS) of States. Their responsibility is mostly concentrated on forecast and warning services both for natural and some of the manmade disasters. In any case, NMHSs should always work in a close co-operation with other organizations involved in a wider state EWS. The role of NMHSs could be demonstrated on the most typical case of EWS in the region-flood forecasting and warning. The state EWS involves, besides NMHS, parts carried out by other authorities such as river basin, civil defence outfits, fire brigades and local administration at various levels. Besides the “professional way” of dissemination of warning also media, especially of electronic type, can play important role in dissemination of warnings to the public. This contribution will concentrate on the role of media in Early Warning leaving their importance in other parts of general disaster management and prevention e.g. giving general information to people about the danger of disasters, how to prepare to be able to face disasters etc.

In many countries rather detailed schemes of an overall disaster management have been released often without stressing the importance of “switching on” of such systems by issuing the first warning. Such warning alerts all responsible bodies in the state EW System. If the first warning is sufficiently accurate and timely then a successful alert and response of responsible

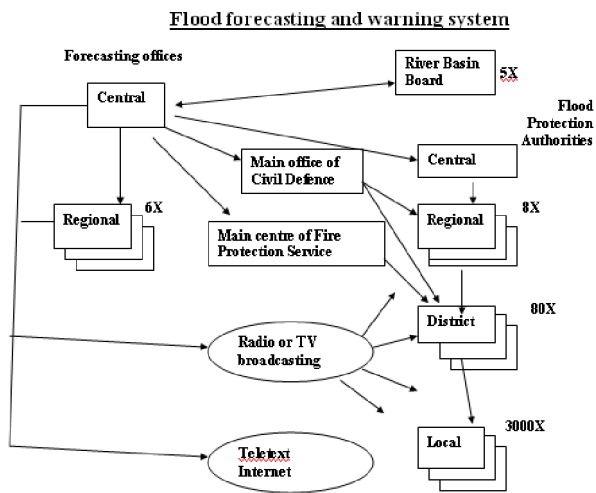
authorities and of the population can be achieved. Moreover, the follow-up dissemination by the media and the mitigation run usually smoothly. On the other hand, an inaccurate or delayed first warning could lead to a panic and increase the damages and losses caused by disaster. As a result, the credibility of an NMHS could decrease significantly. Good preparedness and functioning of NMHS is always critical as “nobody” alarms NMHS!!!

## **Dissemination of flood warnings**

Warnings issued mostly by NMHSs are in all cases disseminated to the public via “professional” part of distribution system (covered by a 24 hour/day service) by means of Civil Protection and/or Fire Protection Services, flood protection authorities, regional and local administrations. NMHS should always be in a direct contact with dispatchers of river basin boards.

However, in some cases, when rapid dissemination to public is urgent, electronic media (TV, Radio, Internet) can advantageously be used for warning dissemination from NMHS directly.

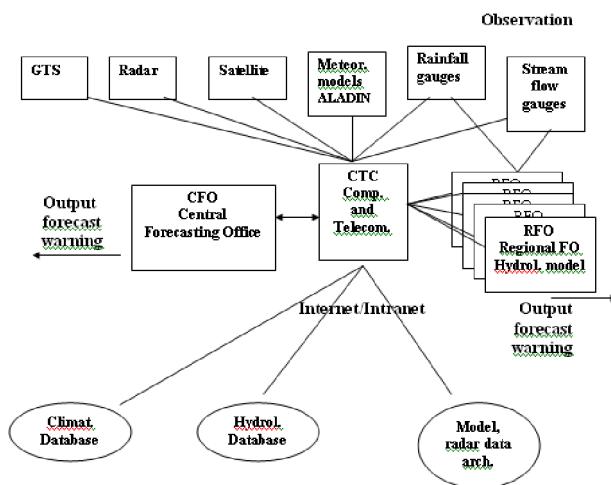
A continuous contact and cooperation of NMHSs with national and local TV and radio stations as well as newspapers should lead to a smooth functioning of the EW System. Detailed conditions for direct broadcast of warning from forecasting offices in Radio and TV should preferably be included in an agreement between



NMHSs and media. These problems have been discussed many times.

It is rather difficult to issue warnings in media in the case that the threat to affected communities is imminent only. At the same time, so-called under warning should also be avoided. In many countries, the concept of a “watch”, “alert” or “advice” has been employed preliminarily to the issuance of warnings.

Very important is the use of a single official issuing authority for warning (single voice principle) to avoid public confusion-it is recommended that NMHSs should always act as such official authorities. Then, warnings and



forecasts issued publicly by commercial providers would be consistent with those issued by NMHSs.

When warnings should be disseminated quickly then electronic media like Radio and TV have to be preferred.

### Radio Broadcast

The Indian meteorological Institute can interrupt current radio broadcast and present fresh warning message. Other possibility is to utilize standard broadcasting sequences delivered directly from forecasting room of IMI several times in morning broadcast. During some disasters also extended news showing the situation and warning for further development of the disaster and direct talk with meteorologist from forecasting office could also be used. Any way, an active involvement of professionals and specialists in a field connected with disaster (meteorology, hydrology, seismology, etc.) should be recommended.

### Television

With Indian TV another possibility for dissemination of warnings consisting of so called scroll with a brief warning appearing on the TV screen during a current TV programme could be applied in urgent cases and quickly approaching disasters. Before and during a disaster TV could advantageously show more sophisticated graphical products like radar and satellite images, precipitation forecast from numerical weather models in the form of images, maps in GIS showing flooded areas and predictions from hydrological models etc. Also interviews of meteorologists and hydrologists dealing with a current disaster and actual situation have always been very beneficial. Anyway, all presentation of warnings in TV and other electronic media should be done very carefully with precise wording. As big damages of property and especially losses of lives could often occur media reporters should be very careful and keep a certain standard in their presentations.

## Internet

Finally, modern telecommunication and information means like Internet, Internet via mobile phones (W@P), SMS messages and warnings should also be applied. There might be a problem that users should be “active” and open “specific pages” first themselves to get warning or other urgent information. On the other hand, these modern means can be used with advantage for graphical presentation of warnings and other useful information not only for public but also for professionals involved in the whole EW System. In some cases also Teletext (accessible by more people than Internet) should be used for warning dissemination. Printed media like newspapers can be used to supply more detailed additional information-but they are generally too slow for direct warning in urgent and quick events.

## Conclusion

It can easily be seen the role of media before and during disasters can often be important and very helpful. However, there have been occurring some drawbacks and mistakes which should be avoided whenever possible. For instance, the above mentioned and strongly recommended “single voice” principle have been violated many times especially by small media companies like local radios, TVs etc. Some media often present warnings not issued by NMHS but “produced” by reporters and their information suppliers !!!

Other problems might be connected with wrong timing of warning dissemination or very vague or incorrect localization of the event. Sometimes, graphical images have been incorrectly presented and explained to the public. Also wording itself plays very important role and should be done very carefully by taking into account not only technical and scientific aspects but also estimation of possible psychological effects on people in areas facing disaster. It occurs

very often that during important time media people present lot of irrelevant and temporary unimportant information instead of efficient use of time for better warning and more detailed explanation of the event.

It has always been recommended to prefer a presentation of positive aspects and side of the event showing good performance of rescue teams and other people involved instead of looking for sensations and pinpointing some drawbacks and errors in disaster warning and prevention. Such discussions should be left for later time after the event. Other problem might be connected with warnings and forecasts prepared by “amateurs” or unreliable sources and, as it has been stressed several times, “single voice” principle and use of warnings originating from NMHS should be used.

However, also NMHSs should care about proper and “up to date” forecasting and warning service capable of dissemination of warnings not only to official channels but also, when necessary, directly to media. In any case, efficient and well-defined crisis management system within a state including involvement of media should be used and backed up by related legislation. Precise definition of the role of NMHS in a state EW System and connection to a crisis management by a law and related norms should be preferred. However, NMHSs should be very active in this direction to find its place in a state Early Warning Systems. Only then, a sufficient financing of such services and technical and scientific progress of NMHSs can be ensured.

**N.B.:-** *Recently, the writer has undergone training on “Media in Disaster Management” at NIDM, New Delhi.*

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